Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A data storage management system comprising:

at least one network-accessible storage device capable of storing data, wherein the at least one network-accessible device capable of storing data comprises a plurality of network-accessible devices capable of storing data, some of which are located at distinct network nodes;

a plurality of network-accessible devices configured to implement storage management processes; and

a communication system enabling the storage management processes to communicate with each other; [[and]]

wherein the storage management processes comprise processes for storing data to the at least one network-accessible device[[.]] ; and

wherein the processes for storing data comprise processes that implement a RAID-type distribution across the plurality of network-accessible devices.

Claim 2 (canceled)

Claim 3 (original): The data storage system of claim 1 wherein the storage management processes comprise processes for serving data from the at least one network accessible storage device.

Claim 4 (original): The data storage system of claim 1 wherein the at least one storage device comprises a RAID storage system.

Claim 5 (original): The data storage system of claim 1 wherein the at least one storage device comprises a computer with direct attached storage (DAS) selected from the group consisting of magnetic hard disk, magneto-optical,

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optical disk, digital optical tape, holographic storage, quantum storage, and atomic force probe storage.

Claim 6 (currently amended): The data storage system of claim [[2]] 1 wherein the plurality of storage devices comprises a peer-to-peer network of storage devices, each storage device having means for communicating state information with other storage devices, at least one storage device comprising means for receiving storage requests from external entities, and at least one storage device comprising means for causing read and write operations to be performed on others of the storage devices.

Claim 7 (original):   The data storage system of claim 1 wherein the communication system comprises a TCP/IP over Ethernet network.

Claim 8 (original):   The data storage system of claim 1 wherein the communication system comprises Gigabit Ethernet network.

Claim 9 (original):   The data storage system of claim 1 wherein the communication system comprises a Fibre Channel fabric.

Claim 10 (original):   The data storage system of claim 1 wherein the communication system comprises a wireless network.

Claim 11 (canceled)

Claim 12 (currently amended): The data storage system of claim [[2]] 1 wherein the processes for storing data comprise processes that implement an n-dimensional parity scheme for data elements across the plurality of network accessible devices.

Claim 13 (currently amended): The data storage system of claim 12 wherein the processes for storing parity data expand or contract [[the]] a size of [[the]] a parity group associated with each of the data elements associated with the n-dimensional parity scheme to whatever extent is desired.] desired.

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Claim 14 (original): The data storage system of claim 12 wherein the storage management processes further comprise processes for recovery of data when one or more of the network-accessible storage devices is unavailable.

Claim 15 (original): The data storage system of claim 12 wherein the storage management processes further comprise processes for access to stored data when one or more of the network accessible storage devices are not desirable data sources for reasons including but not limited to efficiency, performance, network congestion, and security.

Claim 16 (original): The data storage system of claim 1 wherein the plurality of network-accessible devices configured to implement storage management processes further comprise commercial off-the-shelf computer systems implementing a common operating system.

Claim 17 (original): The data storage system of claim 1 wherein the plurality of network-accessible devices configured to implement storage management processes further comprise commercial off-the-shelf computer systems implementing a heterogeneous set of operating systems.

Claim 18 (original): The data storage system of claim 1 wherein the storage management processes comprise processes for implementing greater than two dimensions of parity.

Claim 19 (currently amended): The data storage system of claim [[2]] 1 wherein the processes for storing data comprise processes that store parity and/or mirror data across more than one of the plurality of network-accessible storage devices.

Claim 20 (original): The data storage system of claim 1 wherein the storage management processes comprise processes for adding and removing additional storage capacity to individual storage devices and the system as a whole.

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Claim 21 (currently amended):   A method of data storage management comprising the acts of:

providing at least one network-accessible storage device capable of storing data, wherein the at least one network-accessible device capable of storing data comprises a plurality of network-accessible storage devices capable of storing data, some of which are located at distinct network nodes;

implementing a plurality of storage management process instances;

communicating storage messages between the storage management process instances; [[and]]

storing data to the at least one network-accessible device under control of at least one instance of the storage management processes[[.]] ; and

implementing a peer-to-peer network between the plurality of storage devices;

communicating state information for the plurality of network-accessible storage devices between the plurality of network-accessible storage devices; and

performing read and write operations using the plurality of storage devices.

Claim 22 (canceled)

Claim 23 (original): The method of claim 21 further comprising serving data from the at least one network accessible storage device.

Claim 24 (original): The method of claim 21 wherein the step of storing data to the at least one storage device comprises storing the data in a RAID-like fashion.

Claim 25 (canceled)

Claim 26 (currently amended): The method of claim [[22]] 21 wherein the step of storing data comprises storing data using a RAID-type distribution across the plurality of network-accessible storage devices.

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Claim 27 (currently amended): The method of claim [[22]] 21 wherein the act of storing data comprises storing parity and/or mirror data across more than one of the plurality of network-accessible storage devices.

Claim 28 (currently amended): The method of claim [[22]] 21 wherein the storage management process instances further comprise processes for recovery of data when one or more of the network-accessible storage devices is unavailable.

Claims 29-32 (canceled)

Claim 33 (currently amended): A method of data storage management comprising the acts of:

provlding a plurality of network-accessible storage devices each capable of storing data;

implementing a plurality of storage management process instances;

communicating storage messages between the storage management process instances; and

identifying [[one]] two or more storage devices associated with the data to be stored;

determining parity information data for the data to be stored; [[and]]

storing the unit of data and/or the parity data across the two or more storage devices[[.]] :

retrieving the stored data;

verifying the correctness of the stored data using the parity data; and

upon detection of an error in the retrieved data, retrieving a correct version of the data using the parity data.

Claim 34 (original): The method of claim 33 wherein the parity data comprises an error checking and correcting code.

Claim 35 (currently amended): The method of claim 33 wherein the parity data comprises a mirror copy of the unit of data to be stored.

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Claim 36 (original): The method of claim 33 wherein the parity data is stored in a single network storage node and the unit of data is stored in two or more network storage nodes.

Claim 37 (original): The method of claim 33 wherein the parity data is distributed across multiple storage nodes.

Claim 38 (canceled)

Claim 39 (currently amended): The method of claim 33 further comprising:
        attempting to ~~retrieving~~ retrieve the stored ~~unit of~~ data;
        detecting unavailability of one of the two or more network storage nodes; and
        in response to detecting unavailability, reconstructing [[the]] a correct ~~unit of~~ version of the data using the parity data.

Claim 40 (currently amended): The system of claim 33 wherein the act of storing the ~~unit of~~ data comprises distributing non-identical but logically equivalent data in a storage node.

Claim 41 (currently amended): The system of claim 33 further ~~comprises~~ comprising storing lossy equivalent data in a storage node.

Claim 42 (currently amended): A method of data storage management comprising the acts of :
        providing a plurality of network accessible storage devices capable of storing data;
        implementing a plurality of storage management process instances;
        communicating storage messages between the plurality of storage management processes;
        storing data to the plurality of network accessible storage devices under control of the plurality of storage management processes; [[and]]

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adding and subtracting data storage capacity to and from the data storage under control of the plurality of storage management processes without affecting accessibility of the data storage[[.]] ; and

monitoring the data storage for faults by means of the plurality of storage management processes, wherein the monitoring comprises at least a portion of the plurality of network accessible storage devices transmitting heartbeat messages.

Claim 43 (currently amended): The method of claim 42 further comprising:

~~monitoring the data storage for faults by means of the plurality of storage management processes;~~

compensating for the faults by manipulating the data storage under control of the plurality of storage management processes without affecting accessibility of the data storage.

Claim 44 (currently amended): A method of data storage management comprising the acts of:

providing a plurality of network-accessible storage devices each capable of storing data;

implementing a plurality of storage management process instances; and

communicating storage messages between the storage management process instances, wherein any of the storage management process instances is capable of storage allocation and deallocation across the plurality of network-accessible storage [[nodes;]] devices;

wherein the storage management processes are configured to migrate data amongst the storage devices using the storage messages [[in]] preemptively when a fault condition in at least one of the storage devices is determined to be likely.

Claim 45 (original): The method of claim 44 wherein the storage allocation management processes are configured to use the storage messages to reconstruct data stored in a failed one of the storage devices.

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Claim 46 (currently amended): The method of claim 44 wherein the storage management processes are configured to migrate data amongst the storage devices using the storage messages in response to a detected fault condition in at least one [[fo]] of the storage devices.

Claim 47 (canceled)

Claim 48 (original): The method of claim 44 wherein the plurality of storage devices comprises an arbitrarily large number of storage devices.

Claim 49 (original): The method of claim 44 further comprising:
        associating parity information with a data set;
        storing the parity information in at least some of the storage devices; and
        serving data requests corresponding to the data set by accessing the parity information associated with the data set.

Claim 50 (original): The method of claim 44 further comprising:
        storing a data set in a plurality of the data storage devices using the storage management processes;
        serving data requests corresponding to the data set by accessing the plurality of data storage devices in parallel.

Claim 51 (original): The method of claim 44 further comprising encrypting storage messages before communicating.

Claim 52 (new):   The method of claim 1, wherein the RAID-type distribution comprises managing redundancy operations across the plurality of network-accessible devices.

Claim 53 (new):   The method of claim 1, wherein the RAID-type distribution comprises one or more functionalities selected from the group consisting of data striping, data mirroring, parity data distribution, parity data mirroring, and data entry as N-separated secrets.

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Claim 54 (new):   The method of claim 21, wherein the state information comprises access speed, transfer rate, network locality, physical locality, inter-connectedness, security, reliability, political domain, capacity, or cost.

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